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CENTER FOR OPTO-ELECTRONIC SYSTEMS RESEARCH
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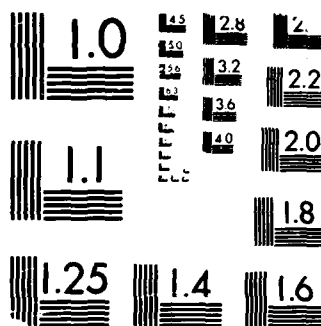
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MICROCOPY RESOLUTION TEST CHART
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REPORT DOCUMENTATION PAGE

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17. COSATI CODES FIELD GROUP SUB-GROUP		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) N/A	
19. ABSTRACT (Continue on reverse if necessary and identify by block number) This final report contains a listing of capital equipment purchased by the ARO-URI Center for Opto-Electronic Systems Research during Year 1 of the Center. This equipment is being used to support the research of 12 faculty investigators and 20 doctoral scholars in the following areas: (a) signal processing and image understanding, (b) optical system design, and (c) sources and sensors for optoelectronic systems.			
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The following listing includes all items of equipment authorized and purchased under the subject grant.

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Sub-Total (for this page) \$103,274

Item	Description (Generic, Vendor, Buyer)	Amount Paid
11	Computer Equipment and Software	
	Cameron Computers Model 9133H 20 Mbyte Winchester Hard Disk TOTAL	2,030.
	Infotek Systems Model MF300 Motorola 68881 based F/P Coprocesor Driver BIN and CSUB Real Arithmetic Module Model AM200 1.0 Megabyte Memory Board TOTAL	2,956.
	IEM, Inc. Model 1927006 Basic 4.0 Compiler, Binary Form Model 3700704 Standard Software Support TOTAL	995.
	Hewlett Packard Model 98613B RAM-based BASIC 4.0 Language TOTAL	260.
	TOTAL	6,241.
12	Computer	
	Leon's SuperMAC 16" Color Trinitron Monitor Tilt/Swivel Stand Spectrum 1000/8 Video Board TOTAL	*3,546.
	UR Computer Sales MacIntosh II w/40Mb Drive and Accessories TOTAL	3,859.
	TOTAL	*7,405.
13	High Power Argon-Ion Laser	
	Coherent, Inc., Laser Products Division Model 100-20UV Innova 20 watt argon laser Model 434-UV Ultraviolet wavelength selector Model 924 Single-frequency Etalon Etalon for ultraviolet lines Six-month warranty	
	TOTAL	53,358.

*Amount approximate; invoice outstanding.

Sub-Total (for this page) \$67,004

Item	Description (Generic, Vendor, Buyer)	Amount Paid
14	MAC + Computer Store MAC Laser Writer Accessories TOTAL	6,184.
	Leon's Computers MAC Table Model 4175 Stand w/shelf insert Model 5820 Chair TOTAL	569.
	TOTAL	6,753.
15	Optical Components Zygo Corporation Transmission sphere, 4", F/no: 3.3 Reference sphere: 37mm, 4%, F/no 0.68 TOTAL	5,252.
	Continental Optics Model CT-100 Collimation Tester TOTAL	904.
	TOTAL	6,156.
16	Storage Oscilloscope Educational Institutional Corp. Model 2235 Tektronix 100MHz trace Oscilloscope Model K212 Oscilloscope Cart TOTAL	1,726.
17	Etalon Assembly Coherent Upgrade CR-699-01 Broadband Ringe Dye Laser TOTAL	7,028.
18	RF Spectrum Analyzer Hewlett Packard Model 8590A Spectrum Analyzer 10KHZ-1.5 GHZ Model 8590A-021 P-IB Interface Model 10833A HP-IB 6' Cable Model 82990A P-IB Interface Card TOTAL	10,510.

Sub-Total (for this page) \$32,173

Item	Description (Generic, Vendor, Buyer)	Amount Paid
19	Lock-In Amplifier	
	UR Computer Sales	
	Model 339 IBM PC AT Computer System	
	Accessories, assembly, testing	3,919.
	TOTAL	
	Stanford Research Systems, Inc.	
	Model SR-530 Two Phase Lock-In Amplifier	
	Model SR-575 Source-code for Control Program	
	Model SR-550 Remote Gain-controlled Voltage Pre-amp	
	Model SR-540 Remote Frequency-Controlled Chopper	
	TOTAL	5,585.
	Brighton Computers	
	Model AST Advantage Premium Expansion Board	
	Model AST Advantage Premium Piggyback Board	
	Quadram Pro-sync + Extended Graphics Adaptor	
	Model 80287-8 IBM Math Coprocessor	
	TECHMAR Labmaster Board	
	TOTAL	4,983.
	TOTAL	14,487.
20	Computer	
	Definicon Systems, Inc.	
	Model 851-750-1 32 Bit 68020 Coprocessor	
	Fortran Compiler	
	TOTAL	1,947.
	Entre' Computers	
	IBM XT w/dual 360K floppy, 20 Mb hard disk	
	TOTAL	1,470.
	Vue Com	
	Model WV-CD20 Panasonce 23" B&W CCD Camera	
	Model TR930 9" B&W Camera Monitor	
	TOTAL	1,095.
	Spectra Services	
	Model PC-Vision plus Frame Grabber	
	TOTAL	1,966.
	TOTAL	6,478.

Sub-Total (for this page) \$20,965

Item	Description (Generic, Vendor, Buyer)	Amount Paid
26	Infrared HeNe Laser Physitec Model 04-0510 HeNe Laser, Multiline Model 04-0545 Single Wavelength Mirror TOTAL	6,326.
27	Computerized Surface Profiling System Tencor Instruments Model 10-02000 Alpha-Step 200 Model SHS0002A Thin Film Calibration Set Accessories TOTAL	33,837.
28	Adapter for Stereozoom TBR Associates Model 42-12-45-02 Bausch & Lomb 1" CCTV Adapter for Stereozoom 7 TOTAL	113.
29	Silicon Wafers Spire Corporation SIMOX WAFER Annealing Epitaxial Silicon Deposition TOTAL	5,423.
30	Wafer Cleaner/Dryer System Headway Research, Inc. Model MC75 Wafer Cleaner/Dryer System TOTAL	18,168.
31	Optical Equipment Newport Research Model F-915 Precision Stage Model LS-24 Breadboard Assored Equipment TOTAL	4,139.
32	Controller Omega Engineering, Inc. Model CN2002-MV1-0-DC2 Controller TOTAL	753.
33	Computer IBM Model 339 PC/AT Accessories TOTAL	*3,933.

*Amount approximate; invoice outstanding.

Sub-Total (for this page) \$72,692

Item	Description (Generic, Vendor, Buyer)	Amount Paid
34	Computer Monitor Leon's Model KV-2511CR Sony Trinitron Computer Monitor/TV TOTAL	 1,121.
35	Video Monitor Miller Assoc. Model PM-970 Ikegami 9" B/W Video Monitor TOTAL	 365.
36	Thermoplast Recorder Newport Corporation Model HC-300 Thermoplast Recorder Model HC-301 Thermoplastic Plate Model HC-302 Detector TOTAL	 15,104.
37	Burners Wale Apparatus Model L9173S Litton 4-fire Burner Assored Hardware TOTAL	 377.
38	High Voltage Supply Northeast Scientific Corp. Model RQE-1601-2121 High Voltage Supply Model RQE-5001-6321 High Voltage Supply Model RQE-5002-2121 High Voltage Supply TOTAL	 *3,035.
39	Closed Cycle Refrigerator RMC-Cryosystems Model LTS-4.2-025-VTO Closed Cycle Refrigerator Turbomolecular Pumping System TOTAL	 *37,650.
40	Monochromator McPherson Model 8191-1301-O Monochromator Model 789A Scan Controller Model 650 Basic End-on Housing Accessories TOTAL	 *9,180.

*Amount approximate; invoice outstanding.

Sub-Total (for this page) \$66,832

Item	Description (Generic, Vendor, Buyer)	Amount Paid
41	Stage Aero Tech Model AS302M TOTAL	1,244.
42	Lockin Amplifier EG&G Princeton Applied Research Model 5208 TOTAL	4,510.
43	Computer UR Computer Store Model M5400 Macintosh II Accessories TOTAL	5,516.
44	Laser Liconix Model 4210NB 10mW He-Cd Laser TOTAL	*7,500.
45	Filter Newport Research Model DT2805/3716 D/A Board TOTAL	3,000.
46	Board Data Translation Model 900 Spatial Filter TOTAL	2,072.
47	Spatial Light Modulator Hamamatsu Corporation Model X1699 Microchannel Spatial Light Modulator TOTAL	24,500.
48	Controller Technology Advancement Group Model M3 MSLM Controller TOTAL	*8,900.
49	Preamplifier Surface Science Laboratories Model 24012A Preamplifier for 2401 Position Computer and ITT F4146M Image Converter TOTAL	3,755.

*Amount approximate; invoice outstanding.

Sub-Total (for this page) \$60,997

Item	Description (Generic, Vendor, Buyer)	Amount Paid
50	Tape Back-up System Brighton Computers Model TD-4340 Micro Mountain File Safe Tape Back-up System TOTAL	 555.
51	Computer Accessories Hard and Soft, Inc. MemChips TOTAL	 2,012.
52	Argon Laser System Spectra Physics, Inc. Model 2020-05S Argon Laser System Model 375B-81CW Dye Laser Accessories TOTAL	 *40,050.
53	Rapid Thermal Processor/CVD System Nanosil, Inc. Model RTCVD-6000 Rapid Thermal Processor Accessories TOTAL	 *91,229.
54	Ion Beam Etching System Veeco Instruments Model 301M Ion Beam Etching System with electrostatic plate and maintenance kits Installation charges estimated TOTAL	 *118,455. *8,872. *127,327.
55	MASSCOMP Upgrade MASSCOMP Model PEP-567-30 Add on CPU for 5700 System BP2-57-15 Add on Backplane Model SFRA-2 Super Lightning Floating Point Installation Charges TOTAL	 *27,450.

*Amount approximate; invoice outstanding.

Sub-Total (for this page) \$288,623

Unaudited Estimate of Total Expenditures for Year I \$1,000,000

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